

REMARKS

Claims 1-74 have been examined on their merits.

Applicant herein cancels claims 25-27 and 41 without prejudice and/or disclaimer.

Applicant herein amends claims 1, 35, 42 and 64. Since the amendments to independent claims 1, 35 and 42 are similar in scope to already-examined recitations in independent claims 51 and 64, Applicant submits that no further search is required on the part of the Patent Office, and the amendments to independent claims 1, 35 and 42 do not raise any new issues. Entry of the amendments to claims 1, 35, 42 and 64 is respectfully requested.

Claims 1-24, 26-40 and 42-74 are all the claims presently pending in the application.

1. Claims 1-74 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ofek *et al.* (U.S. Patent No. 6,052,797) in view of Byrd (U.S. Patent No. 4,673,333). The rejection of claims 25-27 and 41 is now moot due to their cancellation. Applicant respectfully traverses the § 103(a) rejection of claims 1-24, 28-40 and 42-74 for at least the reasons discussed below.

The Patent Office acknowledges that Ofek *et al.* fail to teach or suggest an uninterrupted power supply connected to a main sub-system and a mirror sub-system. The Patent Office alleges that Byrd provides the necessary disclosure to overcome the acknowledged deficiencies of Ofek *et al.*

The combination of Ofek *et al.* and Byrd fail to teach or suggest at least a computer system comprising means for tracking data that has not been previously copied to a non-volatile

memory or to a mirror sub-system to allow for transfer of only such data in the event of a power supply failure, as recited in claim 1. In another portion of the May 19, 2005 Final Office Action, the Patent Office alleges that Ofek *et al.* disclose “limitations [that] pertain to a method for transferring data between a main volatile memory and backup memory in a system having [a] main sub-system and a mirror sub-system.” The Patent Office further alleges that Ofek *et al.* disclose “limitations [that] pertain to transferring data from the main volatile memory to the backup memory.” See page 10 of the May 19, 2005 Final Office Action. However, there are no citations to any portion of Ofek *et al.* that illustrate exactly what “limitations” are taught or suggested by Ofek *et al.* The combination of Ofek *et al.* and Byrd fail to teach or suggest the recordation of those portions of data that were already backed-up in the mirror system and/or the non-volatile memory of the main system, and upon power failure, restrict the data transfer solely to that data which was not previously backed-up in the mirror system and/or the non-volatile memory of the main system. In contrast, the combination of Ofek *et al.* and Byrd only teaches saving all the data, which is wasteful of a significant amount of scarce backup power. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness.

Applicant also submits that there is no motivation to combine Ofek *et al.* with Byrd. Since neither Ofek *et al.* nor Byrd teach or suggest the recordation of data not transferred to non-volatile memory or to backup memory in a mirror system and transfer of that data during a power failure, motivation to combine does not exist. Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness.

With respect to dependent claim 15, there are additional reasons why claim 15 is allowable over the combination of Ofek *et al.* and Byrd. The Patent Office states that Byrd further discloses a monitor system that sends signals when there is a power failure. Applicant submits, however, that Byrd fails to teach or suggest that the power supplies are capable of exchanging status information. As cited by the Patent Office, Byrd discloses a monitor circuit that generates signals when the main power supply is interrupted and restored and that monitors the condition of the power supply means. However, the express language of claim 15 recites that the power supplies *exchange* information. All that Byrd discloses a processor that collects information from the power supplies; there is no disclosure that the collected information is disseminated to the power supplies in some fashion.

With respect to dependent claim 19, there are additional reasons why claim 15 is allowable over the combination of Ofek *et al.* and Byrd. According to Byrd, normal operation of the system is carried out by execution of code stored in ROM (15) on data stored in RAM (14). The execution is performed under the control of CPU (13). *See, e.g.*, Fig. 3 and abstract of Byrd. An auxiliary memory circuit (3) comprises an auxiliary RAM (20), which is connected to an uninterrupted power supply. Upon detection of a failure of power, data is copied from RAM (14) into AUX RAM (20), and the system is shut down. *See, e.g.*, Fig. 5C. The AUX ROM (19) of Byrd is used such that program instructions stored in the AUX ROM (19) are executed by the CPU (13) (col. 6, lines 2-3), which is another clear indication that this AUX ROM is not used, nor intended for use, as a non-volatile memory as recited by claim 19.

With respect to dependent claim 22, there are additional reasons why claim 15 is allowable over the combination of Ofek *et al.* and Byrd. The Patent Office cites a portion of Ofek *et al.* that discusses recovery procedures. *See* col. 25, lines 12-14. In contrast, the express language of claim 22 recites the manner in which the backup memory is selected. The cited portion of Ofek *et al.* has no relation to claim 22 recitation's of selecting backup memory.

Based on the foregoing reasons, Applicant submits that independent claim 1 is allowable over the combination of Ofek *et al.* and Byrd, and further submits that claims 2-24 and 28-34 are allowable as well, at least by virtue of their dependency from claim 1. Applicant respectfully requests that the Patent Office reconsider and withdraw the 35 U.S.C. § 103(a) rejection of claims 1-24 and 28-34.

The combination of Ofek *et al.* and Byrd fail to teach or suggest at least a method for tracking data that has not been previously copied to a non-volatile memory or to a mirror sub-system to allow for transfer of only such data in the event of a power supply failure, as recited in claim 35. In another portion of the May 19, 2005 Final Office Action, the Patent Office alleges that Ofek *et al.* disclose "limitations [that] pertain to a method for transferring data between a main volatile memory and backup memory in a system having [a] main sub-system and a mirror sub-system." The Patent Office further alleges that Ofek *et al.* disclose "limitations [that] pertain to transferring data from the main volatile memory to the backup memory." *See* page 10 of the May 19, 2005 Final Office Action. However, there are no citations to any portion of Ofek *et al.* that illustrate exactly what "limitations" are taught or suggested by Ofek *et al.* The combination of Ofek *et al.* and Byrd fail to teach or suggest at least the recordation of those portions of data

that were already backed-up in the mirror system and/or the non-volatile memory of the main system, and upon power failure, restrict the data transfer solely to that data which was not previously backed-up in the mirror system and/or the non-volatile memory of the main system. In contrast, the combination of Ofek *et al.* and Byrd only teaches saving all the data, which is wasteful of a significant amount of scarce backup power. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness.

Applicant also submits that there is no motivation to combine Ofek *et al.* with Byrd. Since neither Ofek *et al.* nor Byrd teach or suggest the recordation of data not transferred to non-volatile memory or to backup memory in a mirror system and transfer of that data during a power failure, motivation to combine does not exist. Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness.

Based on the foregoing reasons, Applicant submits that independent claim 35 is allowable over the combination of Ofek *et al.* and Byrd, and further submits that claims 36-41 are allowable as well, at least by virtue of their dependency from claim 35. Applicant respectfully requests that the Patent Office reconsider and withdraw the 35 U.S.C. § 103(a) rejection of claims 35-41.

The combination of Ofek *et al.* and Byrd fail to teach or suggest at least a computer program product that enables the tracking data that has not been previously copied to a non-volatile memory or to a mirror sub-system to allow for transfer of only such data in the event of a power supply failure, as recited in claim 35. In another portion of the May 19, 2005 Final Office Action, the Patent Office alleges that Ofek *et al.* disclose “limitations [that] pertain to a method

for transferring data between a main volatile memory and backup memory in a system having [a] main sub-system and a mirror sub-system.” The Patent Office further alleges that Ofek *et al.* disclose “limitations [that] pertain to transferring data from the main volatile memory to the backup memory.” See page 10 of the May 19, 2005 Final Office Action. However, there are no citations to any portion of Ofek *et al.* that illustrate exactly what “limitations” are taught or suggested by Ofek *et al.* The combination of Ofek *et al.* and Byrd fail to teach or suggest at least the recordation of those portions of data that were already backed-up in the mirror system and/or the non-volatile memory of the main system, and upon power failure, restrict the data transfer solely to that data which was not previously backed-up in the mirror system and/or the non-volatile memory of the main system. In contrast, the combination of Ofek *et al.* and Byrd only teaches saving all the data, which is wasteful of a significant amount of scarce backup power. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness.

Applicant also submits that there is no motivation to combine Ofek *et al.* with Byrd. Since neither Ofek *et al.* nor Byrd teach or suggest the recordation of data not transferred to non-volatile memory or to backup memory in a mirror system and transfer of that data during a power failure, motivation to combine does not exist. Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness.

Based on the foregoing reasons, Applicant submits that independent claim 42 is allowable over the combination of Ofek *et al.* and Byrd, and further submits that claims 43-50 are allowable as well, at least by virtue of their dependency from claim 42. Applicant

respectfully requests that the Patent Office reconsider and withdraw the 35 U.S.C. § 103(a) rejection of claims 42-50.

The combination of Ofek *et al.* and Byrd fail to teach or suggest at least a method for tracking data that has not been previously copied to a non-volatile memory or to a mirror sub-system to allow for transfer of only such data in the event of a power supply failure, as recited in claim 51. In the May 19, 2005 Final Office Action, the Patent Office alleges that Ofek *et al.* disclose “limitations [that] pertain to a method for transferring data between a main volatile memory and backup memory in a system having [a] main sub-system and a mirror sub-system.” The Patent Office further alleges that Ofek *et al.* disclose “limitations [that] pertain to transferring data from the main volatile memory to the backup memory.” *See* page 10 of the May 19, 2005 Final Office Action. However, there are no citations to any portion of Ofek *et al.* that illustrate exactly what “limitations” are taught or suggested by Ofek *et al.* The combination of Ofek *et al.* and Byrd fail to teach or suggest at least the tracking of those portions of data that were already backed-up in the mirror system and/or the non-volatile memory of the main system, and upon power failure, restrict the data transfer solely to that data which was not previously backed-up in the mirror system and/or the non-volatile memory of the main system. In contrast, the combination of Ofek *et al.* and Byrd only teaches saving all the data, which is wasteful of a significant amount of scarce backup power. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness.

Applicant also submits that there is no motivation to combine Ofek *et al.* with Byrd. Since neither Ofek *et al.* nor Byrd teach or suggest the tracking of data not transferred to non-

volatile memory or to backup memory in a mirror system and transfer of that data during a power failure, motivation to combine does not exist. Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness.

Based on the foregoing reasons, Applicant submits that independent claim 51 is allowable over the combination of Ofek *et al.* and Byrd, and further submits that claims 52-62 are allowable as well, at least by virtue of their dependency from claim 51. Applicant respectfully requests that the Patent Office reconsider and withdraw the 35 U.S.C. § 103(a) rejection of claims 51-62.

The combination of Ofek *et al.* and Byrd fail to teach or suggest at least a computer program product that enables a computer system to track data that has not been previously copied to a non-volatile memory or to a mirror sub-system to allow for transfer of only such data in the event of a power supply failure, as recited in claim 63. In the May 19, 2005 Final Office Action, the Patent Office alleges that Ofek *et al.* disclose “limitations [that] pertain to a method for transferring data between a main volatile memory and backup memory in a system having [a] main sub-system and a mirror sub-system.” The Patent Office further alleges that Ofek *et al.* disclose “limitations [that] pertain to transferring data from the main volatile memory to the backup memory.” See pages 12 and 13 of the May 19, 2005 Final Office Action. However, there are no citations to any portion of Ofek *et al.* that illustrate exactly what “limitations” are taught or suggested by Ofek *et al.* The combination of Ofek *et al.* and Byrd fail to teach or suggest at least the tracking of those portions of data that were already backed-up in the mirror system and/or the non-volatile memory of the main system, and upon power failure, restrict the

data transfer solely to that data which was not previously backed-up in the mirror system and/or the non-volatile memory of the main system. In contrast, the combination of Ofek *et al.* and Byrd only teaches saving all the data, which is wasteful of a significant amount of scarce backup power. Thus, Applicant submits that the Patent Office cannot fulfill the “all limitations” prong of a *prima facie* case of obviousness.

Applicant also submits that there is no motivation to combine Ofek *et al.* with Byrd. Since neither Ofek *et al.* nor Byrd teach or suggest the tracking of data not transferred to non-volatile memory or to backup memory in a mirror system and transfer of that data during a power failure, motivation to combine does not exist. Applicant submits that the Patent Office cannot fulfill the motivation prong of a *prima facie* case of obviousness.

Based on the foregoing reasons, Applicant submits that independent claim 63 is allowable over the combination of Ofek *et al.* and Byrd, and further submits that claims 64-74 are allowable as well, at least by virtue of their dependency from claim 63. Applicant respectfully requests that the Patent Office reconsider and withdraw the 35 U.S.C. § 103(a) rejection of claims 63-74.

AMENDMENT UNDER 37 C.F.R. § 1.116
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In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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